

## SECTION 157

### PAINT

#### 157.1 GENERAL

This work shall consist of furnishing paint and other materials, cleaning the surfaces to be painted, and applying the paint in substantial compliance with the specifications and as shown on the plans or directed by the ENGINEER.

#### 157.2 REFERENCES

##### 157.2.1 AASHTO

M 67	M 70
M 68	M 72
M 69	

##### 157.2.2 Federal Specifications TT-E-496

#### 157.3 MATERIALS

157.3.1 The various types of paint and other materials shall be furnished in accordance with the following specifications:

157.3.1.1 Unless otherwise provided, red lead shall conform to the provisions of AASHTO M 72, Type I.

157.3.1.2 Aluminum paint shall conform to the provisions of AASHTO M 69, Type I.

157.3.1.3 Foliage green bridge paint shall conform to the provisions of AASHTO M 67, Type II.

157.3.1.4 White paint shall conform to the provisions of AASHTO M 70, Type II.

157.3.1.5 Black bridge paint shall conform to the provisions of AASHTO M 68.

157.3.1.6 Black paint shall conform to the provisions of FSS TT-E-496, Type II.

157.3.1.7 Graphite shall be natural or synthetic. Graphite shall be free from grit, dirt, or other deleterious substances. Natural graphite shall contain not less than 65 percent carbon. The other ingredients shall be silica, iron, and aluminum. Not less than 97 percent of the graphite material shall pass the No. 325 sieve. Flake graphite will not be accepted.

157.3.2 The manufacturer shall submit to the ENGINEER the required number of certified copies of the paint analysis, prior to delivery of such paint. When required, the manufacturer shall submit

samples of paint in the amounts required by the ENGINEER prior to delivery of such paint.

#### 157.4 CONSTRUCTION REQUIREMENTS

157.4.1 All surfaces to be painted shall be clean and dry before paint is applied. Paint shall be applied only when the atmospheric temperature is above 50 degrees F. When paint is applied in cold or damp weather, adequate heated enclosures shall be provided and maintained until the paint is dry.

157.4.2 All paint shall be thoroughly mixed before and during application with approved mechanical mixers. Thinner shall not be added unless approved by the ENGINEER. The amount of thinner to be added shall not exceed 5 percent by volume. For minor structural steel items, red lead paint for field applications by spraying may be thinned with not more than one part of mineral spirits to 8 parts of paint, as packaged, by volume.

157.4.3 Shop and field paint may be applied by brush, roller, or spray. Paint spraying equipment for field painting shall be approved by the ENGINEER prior to use. Each coat of paint shall be applied in a continuous film of uniform thickness, free from pinholes, and shall be thoroughly dry before the next coat of paint is applied. The shop coat shall have a minimum dry film thickness of 1.5 mils, and each field coat shall have a minimum dry film thickness of 1.0 mils. Defective areas shall be repainted and permitted to dry before the next coat of paint is applied.

157.4.4 When requested by the CONTRACTOR and after shop inspection, steel work shall be given a shop coat of paint. Prior to applying the paint, the surfaces shall be cleaned of loose rust, loose mill scale, dirt, grease, and other deleterious material by sand blasting or other approved methods, without damage to the surface of the steel. After the shop coat has been applied and prior to shipment, areas that have been damaged or that are defective shall be cleaned and repainted.

157.4.5 Contact surfaces which are to be riveted, welded, or bolted with high strength bolts, in the shop or in the field, and surfaces that are to be embedded in concrete shall not be painted.

Surfaces that will be inaccessible after fabrication or field erection shall be painted prior to erection.

157.4.6 After erection, rust, dirt, grease, and other deleterious material shall be removed from the steel members as directed by the ENGINEER. The heads of rivets and bolts, nuts, field welds, edges of contact surfaces, and all surfaces from which the shop coat was omitted shall be thoroughly cleaned and painted with one coat of the same type of paint as the shop coat. Field painting shall consist of the type of paint and the number of coats as specified. Where successive paint coats are of the same color, the initial coat shall be tinted slightly to permit distinction between the coverage of each coat. The final coat shall not be tinted.

157.4.7 Wood surfaces shall be painted as specified.

157.4.8 All structural steel shall receive a prime coat of red lead paint and two field coats of aluminum paint, conforming with the requirements of Section 157.3. Red lead paint may be applied either in the shop or in the field. Red lead paint conforming with the requirements of AASHTO M72, Type III or Type IV, may be used for the prime coat, provided the steel is thoroughly cleaned by sandblasting immediately prior to application of the paint. Structural steel contact surfaces, including surfaces to be embedded in concrete, shall not be painted. Surfaces of steel railing posts to be in contact with concrete and post shims shall receive the three required coats of paint before erection. No increase in the computed pay weight of steel will be allowed for paint.

#### 157.5 TRAFFIC PAINT

Traffic paint shall conform to the requirements of the New Mexico State Highway Department.

#### 157.6 MEASUREMENT AND PAYMENT

Paint and the application thereof shall be considered a subsidiary item and no separate measurement or payment will be made.